



EXPRESS MAIL CERTIFICATE

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I hereby certify that, on the date indicated above, this paper or fee was deposited with the U.S. Postal Service & that it was addressed for delivery to the Assistant Commissioner for Patents, Washington, DC 20231 by "Express Mail Post Office to Addressee" service.

J. DAVIS J. DAVIS  
Name (Print) Signature

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DOCUMENT TO OUR DEPOSIT ACCOUNT NO. 04-0100

Customer No.:



07278

PATENT TRADEMARK OFFICE

Docket No.: 3391/OG343

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Guy Reina

Serial No.: 10/057,751

Confirmation No.: 9515

Filed: January 24, 2002

For: AN EFFICIENT FFT IMPLEMENTATION FOR ADSL

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INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of  
Patents and Trademarks  
Washington, DC 20231

Sir:

In order to comply with 37 CFR 1.97 and 1.98, attached hereto is a copy of Form PTO-1449 and copies of the documents listed thereon.

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each document cited (including any cited in applicant's specification which is

not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing Form PTO-1449 next to the document. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

This submission is filed within three months of the filing of the application.

The present Information Disclosure Statement is being submitted in compliance with 37 CFR 1.56, but the citation of such document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner, in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104(a) and 1.106(b) and, in the course of each search, will review for relevance every document cited on the attached form even if not initialed.

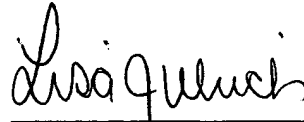
It is believed that no fee is due. However, if the Commissioner determines that a fee is due, the Commissioner is hereby authorized to charge the

above deposit account for any deficiency.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,

Dated: April 11, 2002

A handwritten signature in cursive script, appearing to read "Lisa J. Ulrich".

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE

SHEET 2 OF 2  
(REV. 7-80)

**LIST OF REFERENCES CITED BY APPLICANT**

(Use Several Sheets if Necessary)

DOCKET NO.: 3391/OG343  
APPLICANT: Guy Reina

SERIAL NO: 10/057,751  
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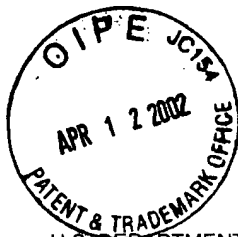
\*EXAMINER  
INITIALS

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6. A Look at the Mixed Radix FFT for 1000 Points,  
[http://www.tektronix.com/Measurement/App\\_Notes/fft/mix.html](http://www.tektronix.com/Measurement/App_Notes/fft/mix.html), 4 pages
7. Computational Frameworks for the Fast Fourier Transform,  
<http://www.cs.cornell.edu/cv/Books/fft.htm>, 7 pages
8. John a. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come," *IEEE Communications Magazine*, May 1990, Vol. 28, No. 5, pages 5-14



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**U.S. PATENT DOCUMENTS**

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<u>*EXAMINER INITIALS</u>	<u>DOCUMENT NUMBER</u>	<u>DATE</u>	<u>NAME</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>FILING DATE</u>
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**FOREIGN PATENT DOCUMENTS**

<u>*EXAMINER INITIALS</u>	<u>DOCUMENT NUMBER</u>	<u>DATE</u>	<u>COUNTRY</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>TRANSLATION YES NO</u>
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**OTHER REFERENCES****(INCLUDING AUTHOR, TITLE DATE, PERTINENT PAGES, ETC.)**\*EXAMINER  
INITIALS

1. Split-Radix Fast Fourier Transform Using Streaming SIMD Extensions, Version 2.1, January 28, 1999
2. Tom Irvine, "THE FAST FOURIER TRANSFORM (FFT)", November 15, 1998
3. Charles Wu, "Implementing the Radix-4 Decimation in Frequency (DIF) Fast Fourier Transform (FFT) Algorithm Using a TMS320C80 DSP," *Digital Signal Processing Solutions*, January 1998
4. Fixed point DSP, <http://www.bores.com/chips/fixed.htm>, 1 page;  
Dynamic, range, <http://www.bores.com/chips/range.htm>, 1 page;  
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5. Anshu Dubey, "Parellel Multidimensional FFT," [http://astro.uchicago.edu/Computing/On\\_Line/fft/fft.html](http://astro.uchicago.edu/Computing/On_Line/fft/fft.html), 1 page;  
Introduction, [http://astro.uchicago.edu/Computing/On\\_Line/fft/node1.html](http://astro.uchicago.edu/Computing/On_Line/fft/node1.html), 2 pages;  
Distributed Algorithm, [http://astro.uchicago.edu/Computing/On\\_Line/fft/node2.html](http://astro.uchicago.edu/Computing/On_Line/fft/node2.html), 4 pages